## **EAST Search History**

## **EAST Search History (Prior Art)**

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	16	two near stroke near engine near (car or automobile)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/01/13 11:02
S1	18	(polyfunctional adj alcohol) and (dimer adj fatty adj acid) and (dicarboxylic adj acid)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 16:07
S2	2	(polyfunctional adj alcohol) and (dimer adj fatty adj acid) and (dicarboxylic adj acid)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/02/17 16:12
S3	1	2005-811664.NRAN.	DERWENT	OR	OFF	2009/02/17 16:14
S4	1238	(glycol with (fatty adj acid)) and (aliphatic adj \$6carboxylic adj acid) and ester	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 16:17
S5	441	(glycol with (fatty adj acid)) and (aliphatic adj \$6carboxylic adj acid) and ester and lubrica\$5 and oil	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 16:20
S6	78	(glycol with (fatty adj acid)) and (aliphatic adj \$6carboxylic adj acid) and ester and lubrica\$5 and oil and engine	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 16:20
S7	76	(glycol with (fatty adj acid)) and (aliphatic adj \$6carboxylic adj acid) and ester and lubrica\$5 and oil and engine and viscosity	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 16:21
S8	185	polyester and (oleate or oleic) and oil and lubrica\$5 and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 16:23
S9	210	(react\$5 with product) and (glycol with (fatty adj acid)) and (aliphatic adj \$6carboxylic adj acid) and ester and lubrica\$5 and oil and viscosity	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 16:28
S10	85	(react\$5 with product) and (glycol with (fatty adj acid)) and (aliphatic adj \$6carboxylic adj acid) and ester and lubrica\$5 and oil and viscosity and (auto or automobile or engine)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 16:29
S11	55	"3390083", "4479883"	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 16:35
S12	0	(glycol with (fatty adj acid)) and (aliphatic adj \$6carboxylic adj acid) and ester and (\$4polarity adj index)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 16:48
S13	77	ester and (\$4polarity adj index)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 16:48

S14	312	508/384,577.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:02
S15	1	508/384,577.ccls. and ((nonpolarity or \$4polarity or polarity) adj index)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:03
S16	1	508/384,577.ccls. and ((polyfunctional adj alcohol) or glycol or \$4pentarythritol) and ((di or dimer) adj fatty adj acid)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:04
S17	182	((polyfunctional adj alcohol) or glycol or \$4pentarythritol) and ((di or dimer) adj fatty adj acid)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/02/17 17:06
S18	4	((polyfunctional adj alcohol) or glycol or \$4pentarythritol) and ((di or dimer) adj fatty adj acid) and oil and (auto or automobile or engine)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/02/17 17:06
S19	4	((polyfunctional adj alcohol) or glycol or \$4pentarythritol) and ((di or dimer or dimerized) adj fatty adj acid) and oil and (auto or automobile or engine)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/02/17 17:08
S20	196	((polyfunctional adj alcohol) or glycol or \$4pentarythritol) and ((di or dimer or dimerized) adj fatty adj acid) and oil and (auto or automobile or engine)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:08
S21	140	dimer adj acid adj ester	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:32
S22	15	(dimer adj acid adj ester) and oil and lubrica\$5 and (auto or automobile or engine)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:32
S23	11	"4459223"	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:41
S24	13	("3180832"   "3223635"   "4388201"). PN. OR ("4459223").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:43
S25	306	(dimer with ester) and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:53
S26	305	(dimer with ester) and (kinematic adj viscosity) and oil	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:53
S27	250	(dimer with ester) and (kinematic adj viscosity) and oil and (auto or automobile or engine)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:53
S28	248	(dimer with ester) and (kinematic adj viscosity) and oil and (auto or automobile or engine) and react\$5	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:53
\$29	8	(dimer with ester) and (kinematic adj viscosity) and oil and (auto or automobile or engine) and react\$5 and (nonpolarity or polarity or \$4polarity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 17:54
S30	641	dimer and acid and alcohol and oil and lubrica\$5 and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:04

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S31	593	dimer and acid and alcohol and ester and oil and lubrica\$5 and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:04
S32	395	(dimer near acid) and alcohol and ester and oil and lubrica\$5 and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:04
S33	265	((dimer near acid) same alcohol same ester) and oil and lubrica\$5 and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:05
S34	1	((dimer near acid) near alcohol near ester) and oil and lubrica\$5 and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:05
S35	0	((dimer near acid) near alcohol near ester) and oil and lubrica\$5 and (kinematic adj viscosity)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/02/17 18:07
S36	1	((dimer near acid) same alcohol same ester) and oil and lubrica\$5 and (kinematic adj viscosity)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/02/17 18:07
S37	30820	(("508").CLAS.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:13
S38	1056	S37 and dimer	USPAT	OR	OFF	2009/02/17 18:13
S39	256	S37 and dimer and acid and alcohol and (kinematic adj viscosity)	USPAT	OR	OFF	2009/02/17 18:14
S40	473	S37 and dimer and acid and alcohol and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:14
S41	239	\$37 and dimer and acid and alcohol and (kinematic adj viscosity) and (polar or polarity or nonpolar\$4)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:14
S42	239	S37 and dimer and acid and (alcohol or (polyfunctional adj alcohol)) and (kinematic adj viscosity) and (polar or polarity or nonpolar\$4)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:15
S43	205	S37 and dimer and acid and (alcohol or (polyfunctional adj alcohol)) and (kinematic adj viscosity) and (polar or polarity or nonpolar\$4) and oil and (auto or automobile or engine)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:15
S44	527	S37 and ((neopentyl adj polyol) or (neopentyl adj glycol) or neopentyglycol) and ((dicarboxylic adj acid) or (azeleic adj acid))	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:25
S45	155	S37 and ((neopentyl adj polyol) or (neopentyl adj glycol) or neopentyglycol) and ((dicarboxylic adj acid) or (azeleic adj acid)) and ester and (auto or automobile or engine) and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:25

S46	85	S37 and ((neopentyl adj polyol) or	US-PGPUB;	OR	OFF	2009/02/17
		(neopentyl adj glycol) or neopentyglycol) and ((dicarboxylic adj acid) or (azeleic adj acid)) and ester and (auto or automobile or engine) and (kinematic adj viscosity) and (polar or polar\$4 or nonpolar or	USPAT; USOCR	************************************		18:25
		nonpolar\$4)				
S47	0	S37 and (kinematic adj viscostiy) with "500"	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:29
S48	92	S37 and (kinematic adj viscosity) with "500"	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:29
S49	0	S37 and (kinematic adj viscosity) with "500-5000"	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:29
S50	5	S37 and (kinematic adj viscosity) adj "500"	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/17 18:30
S51	7	"1311122"	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/02/17 18:46
S52	3	"10311122"	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/02/17 18:46
S53	25	"311122"	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/02/17 18:47
S54	2	"11311122"	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/02/17 18:47
S55	7	"1311122"	EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/02/17 18:49
S56	288	508/455,492.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 07:54
S57	74	508/455,492.ccls. and dimer	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 07:54
S58	68	508/455,492.ccls. and dimer and acid and \$4alcohol	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 07:54
S59	68	508/455,492.ccls. and dimer and acid and \$4alcohol and ester	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 07:54
S60	0	508/455,492.ccls. and nonpolarity and index	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 08:38
S61	13	508/455,492.ccls. and polarity and index	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 08:38
S62	0	nonpolarity adj index	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 08:42
S63	271	\$4polarity adj index	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 08:42
S64	18	(\$4polarity adj index) and carboxylate	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 08:42
S65	0	(nonpolarity with index) and carboxylate	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 08:44
S66	0	(nonpolarity with index)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 08:44

S67	44	(azeleic adj acid) and neopentylglycol	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 08:44
S68	21	(azeleic adj acid) and neopentylglycol and dimer	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 08:44
S69	29	(azeleic adj acid) and neopentylglycol and dimer\$5	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 08:53
S70	1	((aliphatic adj \$5carboxylic adj acid) with (aliphatic adj monofunctional adj alcohol) with ester) and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:15
S71	0	((aliphatic adj \$5carboxylic adj acid) near (aliphatic adj monofunctional adj alcohol) near ester) and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:16
S72	1	((aliphatic adj \$5carboxylic adj acid) same (aliphatic adj monofunctional adj alcohol) same ester) and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:17
S73	3	(aliphatic adj \$5carboxylic adj acid) same (aliphatic adj monofunctional adj alcohol) and ester and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:17
S74	11	(aliphatic adj \$5carboxylic adj acid) same (aliphatic adj alcohol) and ester and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:18
S75	0	ester and (kinematic adj viscosity) adj "500-5000"	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:26
S76	0	ester and ((kinematic adj viscosity) adj "500-5000")	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:26
S77	0	((kinematic adj viscosity) adj "500- 5000")	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:27
S78	26	((kinematic adj viscosity) adj "500")	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:27
S79	30	((kinematic adj viscosity) adj ("500" or "5000"))	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:27
S80	14	((kinematic adj viscosity) adj ("500" or "5000")) and ester	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:28
S81	411	((kinematic adj viscosity) with ("500" or "5000"))	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:30
S82	20	((kinematic adj viscosity) with ("500" or "5000")) with ester	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 09:30
S83	5	"5314634"	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 12:39
S84	13	("3086044"   "3194791"   "3202701"   "3472775"   "4689429").PN. OR ("5314634").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 12:41
S85	114	((neopentyl adj glycol) or ("2,2- dimethyl-1,3-propanediol")) and dimer and azeleic	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 14:42
S86	24	"3202701"	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 14:53

S87	17013	((aliphatic adj (dicarboxylic or	US-PGPUB;	OR	OFF	2009/02/18
		monocarboxylic or \$6carboxylic)) or glutaric or adipic or suberic or sebacic or azelaic or dodecanedioic) and ((monofunctional adj alcohol) or pentanol or hexanol or heptanol or octanol or \$5decanol or \$2ethylhexanol)	USPAT; USOCR			15:28
S88	2620	((aliphatic adj (dicarboxylic or monocarboxylic or \$6carboxylic)) or glutaric or adipic or suberic or sebacic or azelaic or dodecanedioic) same ((monofunctional adj alcohol) or pentanol or hexanol or heptanol or octanol or \$5decanol or \$2ethylhexanol)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 15:28
S89	33	((aliphatic adj (dicarboxylic or monocarboxylic or \$6carboxylic)) or glutaric or adipic or suberic or sebacic or azelaic or dodecanedioic) near ((monofunctional adj alcohol) or pentanol or hexanol or heptanol or octanol or \$5decanol or \$2ethylhexanol)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 15:28
S90	3	((aliphatic adj (dicarboxylic or monocarboxylic or \$6carboxylic)) or glutaric or adipic or suberic or sebacic or azelaic or dodecanedioic) near ((monofunctional adj alcohol) or pentanol or hexanol or heptanol or octanol or \$5decanol or \$2ethylhexanol) and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 15:29
S91	3	((aliphatic adj (dicarboxylic or monocarboxylic or \$6carboxylic)) or glutaric or adipic or suberic or sebacic or azelaic or dodecanedioic) near ((monofunctional adj alcohol) or pentanol or hexanol or heptanol or octanol or \$5decanol or \$2ethylhexanol) and (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 15:33
S92	28	((aliphatic adj (dicarboxylic or monocarboxylic or \$6carboxylic)) or glutaric or adipic or suberic or sebacic or azelaic or dodecanedioic) same ((monofunctional adj alcohol) or pentanol or hexanol or heptanol or octanol or \$5decanol or \$2ethylhexanol) same (kinematic adj viscosity)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/18 15:34
S93	4	"6462001".pn. or "3202701".pn. or "4459223".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2010/01/12 14:39
S94	94	(imperial or croda or (andrew near2 oldfield)) and oil and ester and reac \$4 and alcohol and (dimer near4 acid) and dicarboxylic	US-PGPUB; USPAT; USOCR	OR	ON	2010/01/12 14:57

S95	9	(imperial or croda or (andrew near2 oldfield)) and oil and ester and reac \$4 and alcohol and (dimer near4 acid) and dicarboxylic and monocarboxylic and alcohol and kinematic	US-PGPUB; USPAT; USOCR	OR	ON	2010/01/12 14:57
S96	13	(imperial or croda or (andrew near2 oldfield)) and oil and ester and reac \$4 and (polyol or alcohol) and (dimer near4 acid) and (dicarboxylic or monocarboxylic or alcohol) and kinematic	US-PGPUB; USPAT; USOCR	OR	ON	2010/01/12 15:05
S97	15	(imperial or croda or (andrew near2 oldfield)) and oil and ester and reac \$4 and (polyol or alcohol) and (dimer near4 acid) and (dicarboxylic or monocarboxylic or alcohol) and kinematic	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/12 15:09
S98	656	oil and ester and reac\$4 and (polyol or alcohol) and (dimer near4 acid) and (dicarboxylic or monocarboxylic or alcohol) and kinematic	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/12 15:10
S99	23	oil and ester and (reac\$4 near30 (polyol or alcohol) near30 (dimer near4 acid) near30 (dicarboxylic or monocarboxylic or alcohol)) and kinematic	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/12 15:11
S100	221	heavy near ester	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/12 15:22
S101	O	(heavy near ester) and kinematic and viscosity and ((nonpolarity or non \$1polarity) near3 index)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/12 15:22
S102	7	(ester) and kinematic and viscosity and ((nonpolarity or non\$1polarity) near3 index)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/12 15:22
S103	31	"4912272"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/12 16:32

S104	2	"20030236177"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/12 16:33
S105	23	"5105038"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2010/01/12 17:00
S106	39	(ZDDP or (zinc near2 dialkyldithiophosphate)) near3 (additive near3 package)	US-PGPUB; USPAT; USOCR	OR	ON	2010/01/12 18:21
S107	1	"6462001"	US-PGPUB; USPAT; USOCR	OR	OFF	2010/01/12 18:50
S108	49	(ZDDP or (zinc near2 dialkyldithiophosphate)) near5 (additive near3 package)	US-PGPUB; USPAT; USOCR	OR	ON	2010/01/12 18:51
S109	401	(hitec or hitec\$8) and (zinc or ZDDP)	US-PGPUB; USPAT; USOCR	OR	OFF	2010/01/13 08:59
S110	31	(hitec or hitec\$8) near10 (zinc or ZDDP)	US-PGPUB; USPAT; USOCR	OR	OFF	2010/01/13 08:59
S111	3	"Hitec 381"	US-PGPUB; USPAT; USOCR	OR	OFF	2010/01/13 09:03
S112	3	hitec near3 "381"	US-PGPUB; USPAT; USOCR	OR	OFF	2010/01/13 09:05
S113	48	(hitec or hitec\$8) near30 (zinc or ZDDP)	US-PGPUB; USPAT; USOCR	OR	OFF	2010/01/13 09:06
S114	53	(hitec or hitec\$8) near30 (zinc or ZDDP)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/01/13 09:18
S115	29	(hitec or hitec\$8) near30 (zinc or ZDDP) and lubrizol	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/01/13 09:32
S116	1	"1999016849"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/01/13 09:49
S117	0	"1999016849""11188813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/01/13 09:49

S118	5	"11188813"	US-PGPUB;	OR	OFF	2010/01/13
			USPAT;			09:49
			USOCR; FPRS;			
			EPO; JPO;			
			DERWENT;			
			IBM_TDB			

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